## ABSTRACT OF THE DISCLOSURE

A device (1) for aspirating and dispensing liquid samples having a pump (2), which comprises a cylindrical chamber (3), a piston (4) movable in this cylindrical chamber, and a piston drive (5) engaging on the piston. The device additionally comprises a pulse generator (6), which effects dispensing of samples from a liquid by generating pressure waves in this liquid and a tip (8) connected via a line (7) with the cylindrical chamber (3), with the piston drive (5) comprising a first drive (9) and a second drive (10), implemented as a pulse generator (6). Such a device comprises a channel (27) for rinsing or flushing the cylindrical chamber (3), with the channel (27) discharging into the cylindrical chamber (3). Furthermore, the invention also concerns systems with, for example, 384 or more such devices that are arranged in an array.

15